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7. (Amended) The impact absorbing composite of claim 6 wherein the closed cell polymeric foam comprises polymeric material that is selected from the group consisting of polystyrene, polyethylene, polypropylene, and any combination of any of these.

8. The impact absorbing composite of claim 6 wherein the closed cell polymeric foam has a density, determined using ASTM D1622-98, that ranges from about 1 pound per cubic foot to about 80 pounds per cubic foot.

9. The impact absorbing composite of claim 1 wherein each impact absorbing member is free of voids.

10. The impact absorbing composite of claim 1 wherein adjacent impact absorbing members are discrete and individually distinct from each other.

11. The impact absorbing composite of claim 1 wherein adjacent impact absorbing members are in contact with each other.

12. The impact absorbing composite of claim 1 wherein the impact absorbing members are movable independently with respect to each other.

13. The impact absorbing composite of claim 1 wherein the impact absorbing composite is reversibly conformable to arcuate three-dimensional surfaces and to discontinuous three-dimensional surfaces.

14. The impact absorbing composite of claim 1 wherein the flexible layer is stretchable and elastic.

15. The impact absorbing composite of claim 1 wherein the flexible layer comprises a net or open-meshed fabric.

16. The impact absorbing composite of claim 1 wherein:  
the flexible layer has a first major surface;  
the impact absorbing members are each located on the same side of the flexible layer  
with each impact absorbing member bonded to the first major surface;  
all of the impact absorbing members collectively covering the first major surface of  
the flexible layer with a footprint having an area, a ratio of the area of the  
footprint to the area of the first major surface being at least about 80%.

17. The impact absorbing composite of claim 16 wherein the ratio of the area of the footprint to the area of the first major surface is at least about 80%.

18. The impact absorbing composite of claim 1 wherein the impact absorbing members are first impact absorbing members, the impact absorbing composite further comprising a plurality of second impact absorbing members attached in working relation with the first impact absorbing members, the first impact absorbing members and the second impact absorbing members located on opposing sides of the flexible layer.

~~19. The impact absorbing composite of claim 18 wherein the first impact absorbing members comprise a polymeric material and the second impact absorbing members comprise a polymeric material, the polymeric material extending continuously between first impact absorbing members and second impact absorbing members that are in registry with each other, and the polymeric material extending through the flexible layer.~~

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20. (Amended) An impact absorbing composite, the impact absorbing composite comprising:  
a plurality of first impact absorbing members, the first impact absorbing members  
formed of a polymeric material;  
a plurality of second impact absorbing members, the second impact absorbing  
members formed of the polymeric material; and  
a flexible layer, each first impact absorbing member and each second impact  
absorbing member attached to the flexible layer and the polymeric material  
extending through the flexible layer.

21. The impact absorbing composite of claim 20 wherein the first impact absorbing members and the second impact absorbing members are on opposing sides of the flexible layer.

22. The impact absorbing composite of claim 20 wherein each first impact absorbing member is free of voids.

23. The impact absorbing composite of claim 20 wherein adjacent first impact absorbing members are discrete and individually distinct from each other.

24. The impact absorbing composite of claim 20 wherein adjacent first impact absorbing members are in contact with each other.

25. The impact absorbing composite of claim 20 wherein the first impact absorbing members are movable independently with respect to each other.

26. The impact absorbing composite of claim 20 wherein the impact absorbing composite is reversibly conformable to arcuate three-dimensional surfaces and to discontinuous three-dimensional surfaces.

27. The impact absorbing composite of claim 20 wherein the flexible layer comprises a net or open-meshed fabric.

AL 28. (Amended) The impact absorbing composite of claim 20 wherein the polymeric material extends continuously between any first impact absorbing members and second impact absorbing members that are in registry with each other on opposing sides of the flexible layer.

29. An impact absorbing composite, the impact absorbing composite comprising:  
a plurality of impact absorbing members; and  
a flexible layer, the flexible layer extending through each impact absorbing member  
and each impact absorbing member attached to the flexible layer.

30. The impact absorbing composite of claim 29 wherein each impact absorbing member is free of voids.

31. The impact absorbing composite of claim 29 wherein adjacent impact absorbing members are discrete and individually distinct from each other.

32. The impact absorbing composite of claim 29 wherein adjacent impact absorbing members are in contact with each other.

33. The impact absorbing composite of claim 29 wherein the impact absorbing members are movable independently with respect to each other.

AS 34. (Amended) A method of making an impact absorbing composite, the method comprising:  
attaching a plurality of impact absorbing members to a flexible layer, the impact  
absorbing members being solid and predominantly free of voids.

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35. (Amended) A method of making an impact absorbing composite, the method comprising:  
attaching a plurality of first impact absorbing members to a flexible layer, the first  
impact absorbing members formed of a polymeric material; and  
attaching a plurality of second impact absorbing members to the flexible layer, the  
second impact absorbing members formed of the polymeric material, the first  
impact absorbing members and the second impact absorbing members  
located on opposing sides of the flexible layer and the polymeric material  
extending through the flexible layer.

36. A method of making an impact absorbing composite, the method comprising:  
forming a plurality of impact absorbing members; and  
passing a flexible layer through each impact absorbing member; and  
attaching each impact absorbing member to the flexible layer.

37. A method of forming an impact absorbing composite, the method comprising:  
placing a flexible layer into a molding apparatus, the molding apparatus having a  
plurality of first surfaces that define a plurality of first mold cavity portions  
and a second surface that defines a second mold cavity portion and, the  
flexible layer positioned between the first mold cavity portions and the  
second mold cavity portion, and the first mold cavity portions and the second  
mold-cavity portion collectively forming a mold cavity;  
placing polymeric resin in the mold cavity;  
expanding the polymeric resin in the mold cavity to form an impact absorbing  
composite intermediate, the impact absorbing composite intermediate  
comprising expanded polymeric resin and the flexible layer; and  
finishing the impact absorbing composite intermediate to form the impact absorbing  
composite.

38. The method of claim 37 wherein:  
placing polymeric resin in the mold cavity comprises placing the polymeric resin in  
the first mold cavity portions and the second mold cavity portion; and  
expanding the polymeric resin in the mold cavity comprises expanding the polymeric  
resin in the first mold cavity portions and expanding the polymeric resin in  
the second mold cavity portion.
39. The method of claim 38 wherein:  
the flexible layer has a first major surface and a second major surface that are located  
on opposing sides of the flexible layer and has internal surfaces that define  
a plurality of holes that extend through the flexible layer from the first major  
surface to the second major surface; and  
placing polymeric resin in the mold cavity comprises placing the polymeric resin in  
the second mold cavity portion and allowing the polymeric resin to pass  
through the holes of the flexible layer and into the first mold cavity portions.
40. The method of claim 38 wherein the flexible layer has internal surfaces that define  
a plurality of holes in the flexible layer, the method further comprising securing the expanded  
polymeric resin within the holes of the flexible layer.
41. The method of claim 40 wherein:  
the flexible layer has a first major surface and a second major surface, the first major  
surface and the second major surface located on opposing sides of the flexible  
layer; and  
the holes of the flexible layer extend through the first major surface, through the  
second major surface, or through both the first major surface and the second  
major surface.

42. The method of claim 37 wherein the impact absorbing composite intermediate comprises a plurality of first impact absorbing members, the first impact absorbing members formed in the first mold cavity portions, and adjacent first impact absorbing members are discrete and individually distinct from each other.

43. The method of claim 42 wherein:  
the flexible layer has internal surfaces that define a plurality of holes in the flexible layer;  
the first impact absorbing members comprise the expanded polymeric resin; and  
the expanded polymeric resin of the first impact absorbing members extends into and is fixed within the holes of the flexible layer.

44. The method of claim 37 wherein the expanded polymeric resin comprises closed cell polymeric foam.

45. The method of claim 44 wherein the closed cell polymeric foam comprises polymeric material that is selected from the group consisting of polystyrene, polyethylene, polypropylene, and any combination of any of these.

*Amended*  
46. (Amended) The method of claim 37 wherein the impact absorbing composite comprises:  
a plurality of first impact absorbing members attached to the flexible layer; and  
a plurality of second impact absorbing members attached to the flexible layer, the first impact absorbing members and the second impact absorbing members attached to opposing sides of the flexible layer.

47. The method of claim 46 wherein the first impact absorbing members are free of voids.

48. The method of claim 46 wherein adjacent first impact absorbing members are discrete and individually distinct from each other.

49. The method of claim 46 wherein the first impact absorbing members are movable independently with respect to each other.

50. The method of claim 37 wherein the flexible layer comprises a net or open-meshed fabric.

51. The method of claim 37 wherein:  
the impact absorbing composite intermediate comprises a plurality of first impact absorbing members, the first impact absorbing members formed in the first mold cavity portions, and  
finishing the impact absorbing composite intermediate comprises:  
removing excess expanded polymeric resin to form a plurality of second impact absorbing members, the first impact absorbing members and the second impact absorbing members located on opposing sides of the flexible layer.

52. The method of claim 37 wherein:  
removing excess expanded polymeric resin means thermally cutting excess expanded polymeric resin, mechanically cutting or routing excess expanded polymeric resin, vaporizing excess expanded polymeric resin, or any of these in any combination.

53. The impact absorbing composite of claim 29 wherein the flexible layer is stretchable and elastic.



54. The impact absorbing composite of claim 29 wherein the flexible layer comprises a net or open-meshed fabric.

55. The method of claim 34 wherein the flexible layer is stretchable and elastic.

56. The method of claim 34 wherein the flexible layer comprises a net or open-meshed fabric.

57. The method of claim 35 wherein the flexible layer is stretchable and elastic.

58. The method of claim 36 wherein the flexible layer is stretchable and elastic.

59. The method of claim 36 wherein the flexible layer comprises a net or open-meshed fabric.

60. An impact absorbing composite, the impact absorbing composite comprising:  
a plurality of impact absorbing members, the impact absorbing members comprising  
a first polymeric material, and  
a flexible layer, the flexible layer comprising internal surfaces that define a plurality  
of holes in the flexible layer, a second polymeric material fixed within the  
holes of the flexible layer, the second polymeric material in the holes of the  
flexible layer bonded to the second polymeric material of the impact  
absorbing members.

A.A. Goldfine

61. The impact absorbing composite of claim 60 wherein:  
the flexible layer has a first major surface and a second major surface, the first major surface and the second major surface located on opposing sides of the flexible layer; and  
the holes of the flexible layer extend through the first major surface or the second major surface.
62. The impact absorbing composite of claim 60 wherein the first polymeric material and the second polymeric material are the same.
63. The impact absorbing composite of claim 60 wherein the flexible layer is stretchable and elastic.
64. An impact absorbing composite, the impact absorbing composite comprising:  
a plurality of impact absorbing members, the impact absorbing members comprising a polymeric material; and  
a flexible layer, the flexible layer comprising internal surfaces that define a plurality of holes in the flexible layer, the polymeric material of the impact absorbing members extending into and fixed within the holes of the flexible layer.
65. The impact absorbing composite of claim 64 wherein the flexible layer is stretchable and elastic.
66. An impact absorbing composite, the impact absorbing composite comprising:  
a plurality of first impact absorbing members, the first impact absorbing members formed of a polymeric material;  
a plurality of second impact absorbing members, the second impact absorbing members formed of the polymeric material; and

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a flexible layer, each first impact absorbing member and each second impact absorbing member attached to opposing sides of the flexible layer and the polymeric material extending from the first impact absorbing members to the second impact absorbing members.

67. The impact absorbing composite of claim 66 wherein the flexible layer is stretchable and elastic.

68. An impact absorbing composite, the impact absorbing composite comprising: an impact absorbing layer, the impact absorbing layer comprising a discontinuous array of separate and individual impact absorbing members; and a flexible layer, each impact absorbing member attached to the flexible layer.

69. The impact absorbing composite of claim 58 wherein adjacent impact absorbing members are discrete and individually distinct from each other.

70. The impact absorbing composite of claim 68 wherein the flexible layer is stretchable and elastic.

71. The impact absorbing composite of claim 68 wherein the flexible layer comprises a net or open-meshed fabric.

72. A method of making an impact absorbing composite, the method comprising: attaching a plurality of first impact absorbing members to a flexible layer, the first impact absorbing members formed of a polymeric material; and attaching a plurality of second impact absorbing members to the flexible layer, the second impact absorbing members formed of the polymeric material, the first impact absorbing members and the second impact absorbing members

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